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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,911	03/13/2002	Florence L'Alloret	220758USOPCT	2979
22850	7590	03/15/2006		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER FUBARA, BLESSING M	
			ART UNIT	PAPER NUMBER

1618

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/070,911

**Applicant(s)**

L'ALLORET ET AL.

**Examiner**

Blessing M. Fubara

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

Examiner acknowledges receipt of amended Brief filed 12/07/05. Claims 34-69 are pending.

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action has been further considered and the finality of that action is withdrawn in view of the action below.

#### ***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 34 is directed to a composition comprising an aqueous phase where the aqueous phase comprises at least one compound with an optical effect and a polymer comprising water soluble units and units having lower critical solution temperature (LCST); the polymer is a block comprising water soluble units alternating with LCST units or the polymer is a graft having water soluble unit and LCST units in the backbone. Dependent claim 40 defines the water soluble units to comprise of (meth)acrylate or vinyl monomers of formula  $H_2C=CR-C=O(X)$ , with R, X as defined therein and the prior art only has to disclose one of the varied and various monomers listed in claim 40 that is capable of forming the polymer; dependent claim 41 defines the water soluble polymer as one of water soluble polyurethane, xanthan gum, alginates or derivatives, cellulose derivatives, galactomannans and polyethyleneimine and the prior art only has to disclose one of the varied and various water soluble units listed in claim 41. The LCST is a polyether or polyvinyl methyl ether or polymeric N-substituted acrylamide derivatives containing units with LCST or copolymeric N-substituted acrylamide derivatives containing

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units with LCST or polyvinylcaprolactam and vinylcaprolactam (claim 43) and the prior art only has to disclose one of the LCST listed in claim 43. The LCST is further limited by claims 47 and 49 and the prior art only has to disclose one of the LCST listed in claims 47 and one of the LCST listed in claim 49. The method of the method claims 62 and 63 is directed to combining the various components of the claimed composition. A prior art that discloses the claimed composition would meet the method claims because the process of making the composition combines the various components of the composition to make the composition just as the combining steps in these claims. The comprising language of the claims is open and the claims contemplate varied and many monomers and polymers as the LCST and as the water-soluble polymers. No specific combination of LCST and water-soluble polymers is claimed.

4. Claims 34-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Torgerson et al. (US 5,730,966).

Torgerson discloses compositions comprising water or alcohol soluble thermoplastic elastomeric copolymers and Torgerson's intended uses for the composition are topical application to the skin, application to the hair for styling and as cosmetic (abstract). The polymer comprises repeating units of A and B polymerizable monomers (column 2, lines 61-65), monomer A is as described in column 3, lines 1-16) and monomer B is as described in column 3, lines 17-64). The A and B monomers are related as copolymers in the polymeric composition of Torgersen and the molecular weight of the copolymer is in the range of 10,00 to 5,000,000 (column 6, lines 5-17). The structural formula for the A-monomers in column 7 of Torgerson meets the structural formula of the monomer in claim 40 (b) and 47 (b) when, e.g.  $R^4$  is H, X is -OH, -OR, -NH<sub>2</sub>, -NHR<sup>4</sup>, and R<sup>5</sup> is H and C<sub>1</sub>-C<sub>3</sub> (column 8, lines 16-67) and the specific A-

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monomers listed in column 8, line 16-67 meet the limitations of the water soluble polymers; specifically, since claims 47 and 49 list the vinyl monomers as an LCST, the Torgerson structure in column 7 when, e.g.  $R^4$  is H, X is -OH, -OR, -NH<sub>2</sub>, -NHR<sup>4</sup>, and  $R^5$  is H and C<sub>1</sub>-C<sub>3</sub> also meets the limitation of the LCST recited in claims 47 and 49, and the implication of claims 47 and 49 is that in some embodiments, the LCST can be the water soluble unit and the water soluble unit can be the LCST. The N-vinylpyrrolidones, N-vinylcaprolactams (column 10; lines 13-46) and the monomer/polymer units listed in column 9, line 1 to column 13 line 27 are the B-monomers meeting the limitation of LCST of claims 43 and 44. Propylene glycol, ethylene glycol, acrylates, caprolactones and imidazoles are disclosed as monomers (columns 3-11). The recitation of heat induced de-mixing temperature in aqueous solution is a property of the LCST and since a compound and its properties are mutually exclusive, the LCST of the prior art that is the same as that claimed would necessarily have the same property under the proposed recited conditions. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, Torgerson anticipates the claims 42, 45, 46, 48 and 50 that recite the properties of the monomers/polymers. The B monomer/polymer of Torgerson, which is the same as the claimed LCST is present at about 15-50% and meets the limitation of claims 51-53. The concentration of the polymer in Examples XVI-XVIII of Torgerson is 2% in the aqueous and thus meets the limitations of claims 54 and 55. The sunscreen agents and skin lightening agents (column 18, lines 13-67) contained in the formulation of Torgerson meets the limitation of compound with

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optical effect. The method steps of claims 62 and 63 are met by the mixing and combining of the components of the formulation by the method by which the formulation is prepared in Torgerson (see at least Examples XVI-XVIII). Regarding claims 64-65, the broad humidity range of from 40-95 and the room temperature of 25 °C fall within the normal humidity and temperature of any typical day. The formulation of Torgerson can be oil-in-water emulsion and contains oily phase, surfactants, emulsifiers, celluloses and xanthan gums as gelling agents (column 19, line 64; column 22, line 55; column 23, lines 45-54), dimethicone in Example XV is an oil and the formulation can be applied to the skin or hair and thus meets the limitations of claims 67-69 and since the formulation of Torgerson is the same as the claimed formulation, application of the formulation to hair or skin would necessarily have the same effect.

“When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

5. Claims 34 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitt et al. (US 5,412,035).

Schmitt discloses an additive that is a polymer that comprises 60 to 100% of units derived from at least one monomer selected from the group consisting of alkyl acrylates, alkyl methacrylates, N-alkyl acrylamides, vinyl ethers, and vinyl esters containing 12 to 30, preferably 12 to 22 carbon atoms, 0 to 20% of units derived from at least one monomer selected from the group consisting of alkyl acrylates, alkyl methacrylates, N-alkyl acrylamides, vinyl ethers, and vinyl esters containing 4 to 12 carbon atoms, and 0 to 15% of units derived from at least one polar monomer selected from the group consisting of acrylic acid, methacrylic acid, itaconic

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acid, acrylamide, methacrylamide, acrylonitrile, methacrylonitrile, vinyl acetate and N vinyl pyrrolidone (claim 11); the additive is contained in a formulation that comprises pressure sensitive adhesive that can be a block polymer, fillers, plasticizers, tackifiers, stabilizers and pigments and the formulation can be applied to the skin (column 3, lines 48 and 53; column 9, lines 22-67; column 11, lines 33-25 and 42-60). The pigment meets the limitation of a compound with an optical effect. “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 37 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 37 states that the water-soluble polymer is obtainable by polymerization, polycondensation, natural polymers ... or combinations thereof. However, it is not clear how the polymer is obtained by natural polymers, ... or combinations thereof. The claim is examined as obtained by polymerization or polycondensation and the natural polymers, ... are water-soluble polymers. This interpretation is supported by claim 41, which further limits the water-soluble polymers as natural or modified natural polymers, with the water-soluble polyurethanes and the polyethyleneimines as synthetics derived from polymerization or polycondensation.

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Clarification is respectfully requested.

***Double Patenting***

The provisional obviousness double patenting rejection over application numbers 10/070,922 and 10/070,910 are not made in this office action because the copending claims do not contain at least one compound with an optical effect. The double patenting rejection over US 6,689,856 is withdrawn because the issued claims do not contain a compound with an optical effect.

However, the provisional double patenting rejection over application 10/197,560 is maintained because the formulation contains sun block screening agents and these agents have optical effect (see at least claims 83-85, 89 and 98 for the at least one compound with an optical effect). Applicants have not argued this rejection. This rejection is not held in abeyance.

***Response to Arguments***

8. Applicants' arguments filed 12/07/05 have been fully considered but they are not persuasive.

Regarding the issue of block copolymer not alternating in Torgerson, it is noted that the polymers are alternating between the water-soluble and the LCST polymers. It is also noted that the polymer in claim 34 can be block or grafted and applicants acknowledge Torgerson as disclosing grafted polymer. There is no picking and choosing because the graft polymer is one of the polymer types recited. Secondly, the polymers claimed are so varied and many and without a claim to any specific combination of these polymers that Torgerson anticipates the broad polymers. Regarding the water solubility of the polymer of Torgerson, it is noted that Torgerson specifically discloses that the polymer is water or alcohol soluble and the varied



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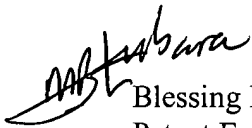
monomers and polymers are disclosed by Torgerson. It is further noted that applicants claimed polyurethane in the dependent claim is thermoplastic. Regarding applicants statement on selecting a combination of water soluble units and LCST that may result in many combinations when using the present invention as a guide, it is noted that applicants' polymers and monomers are many and different with no claim to specific polymers having specific water soluble polymers and LCST and applicants' polymers are any combination of the varied polymers and monomers claimed. In this respect, applicants' claims are not used as a guide and no reconstruction of the broad polymers was made. Claim 34 is either a block or a graft polymer with no specified polymer. The limitations of claims 35, 37-50, 57-59 and 61 are disclosed by the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

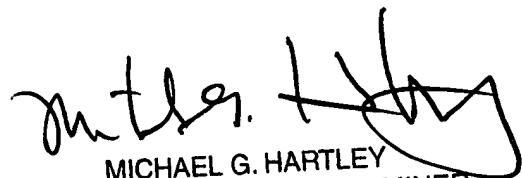
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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